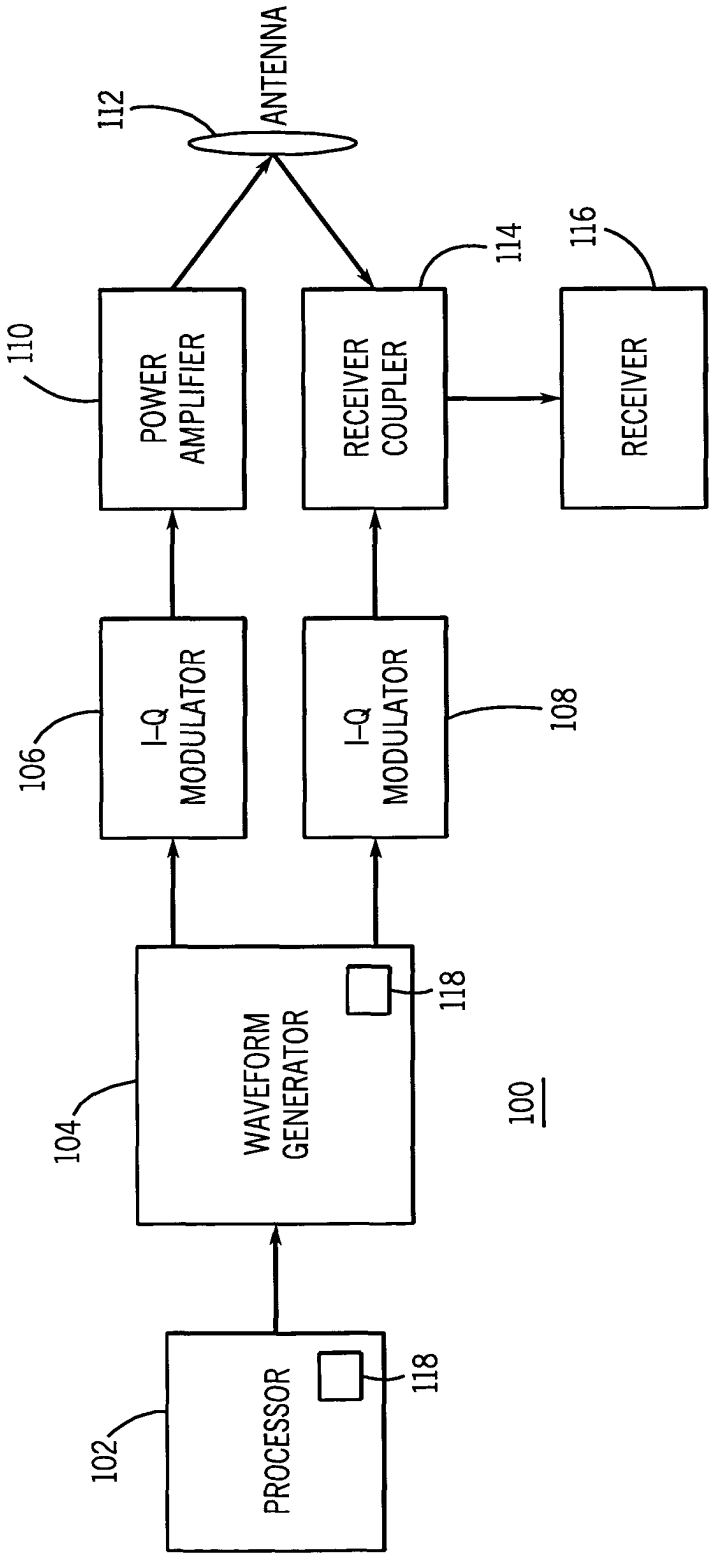
ANTENNA
112
116
114
110
POWER AMPLIFIER
RECEIVER COUPLER
RECEIVER
106
I-Q MODULATOR
I-Q MODULATOR
108
118
104
WAVEFORM GENERATOR
100
118
102
PROCESSOR

FIG. 1

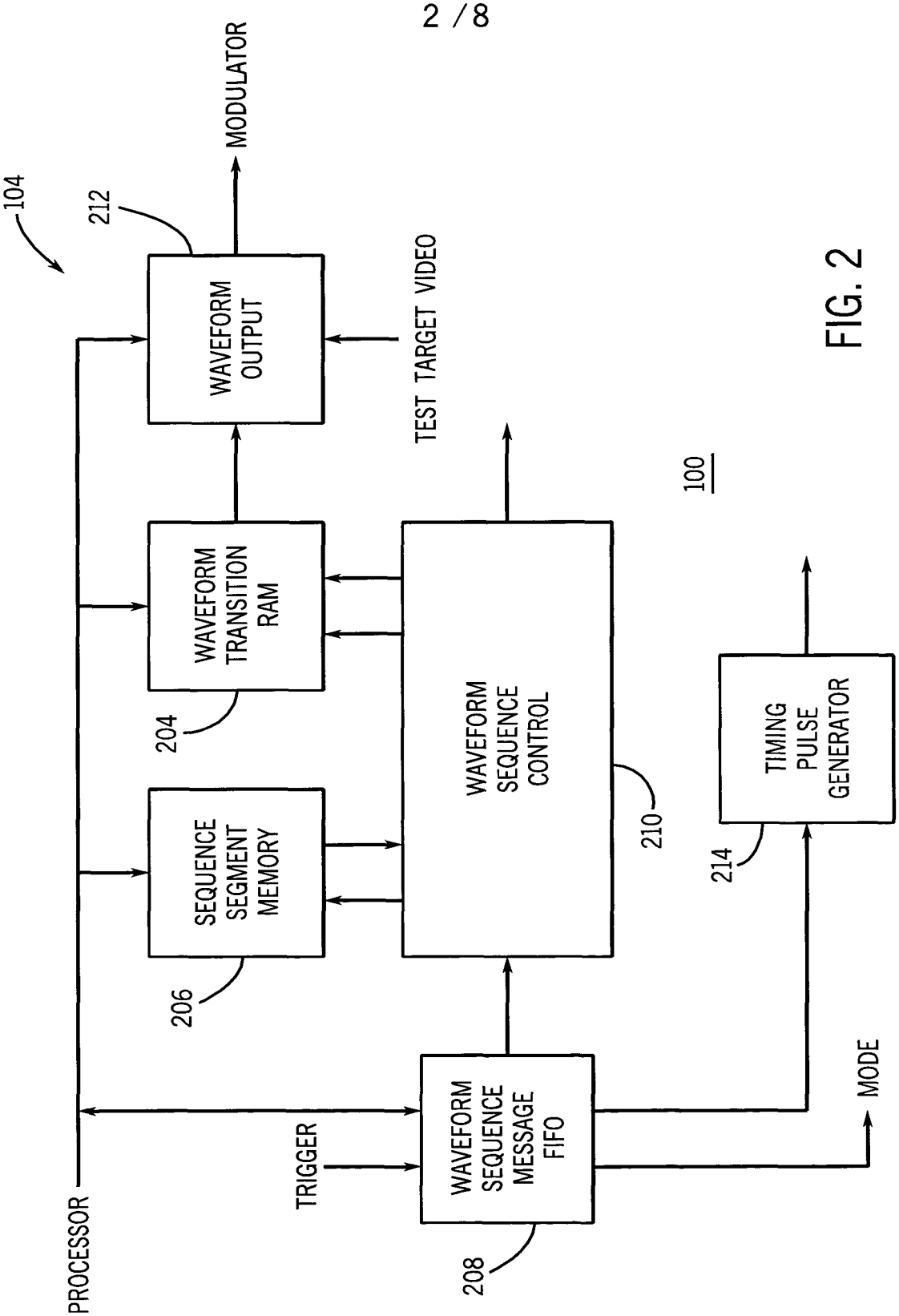
104
212
MODULATOR
WAVEFORM OUTPUT
TEST TARGET VIDEO
100
WAVEFORM TRANSITION RAM
204
WAVEFORM SEQUENCE CONTROL
210
TIMING PULSE GENERATOR
214
SEQUENCE SEGMENT MEMORY
206
PROCESSOR
TRIGGER
WAVEFORM SEQUENCE MESSAGE FIFO
208
MODE

FIG. 2

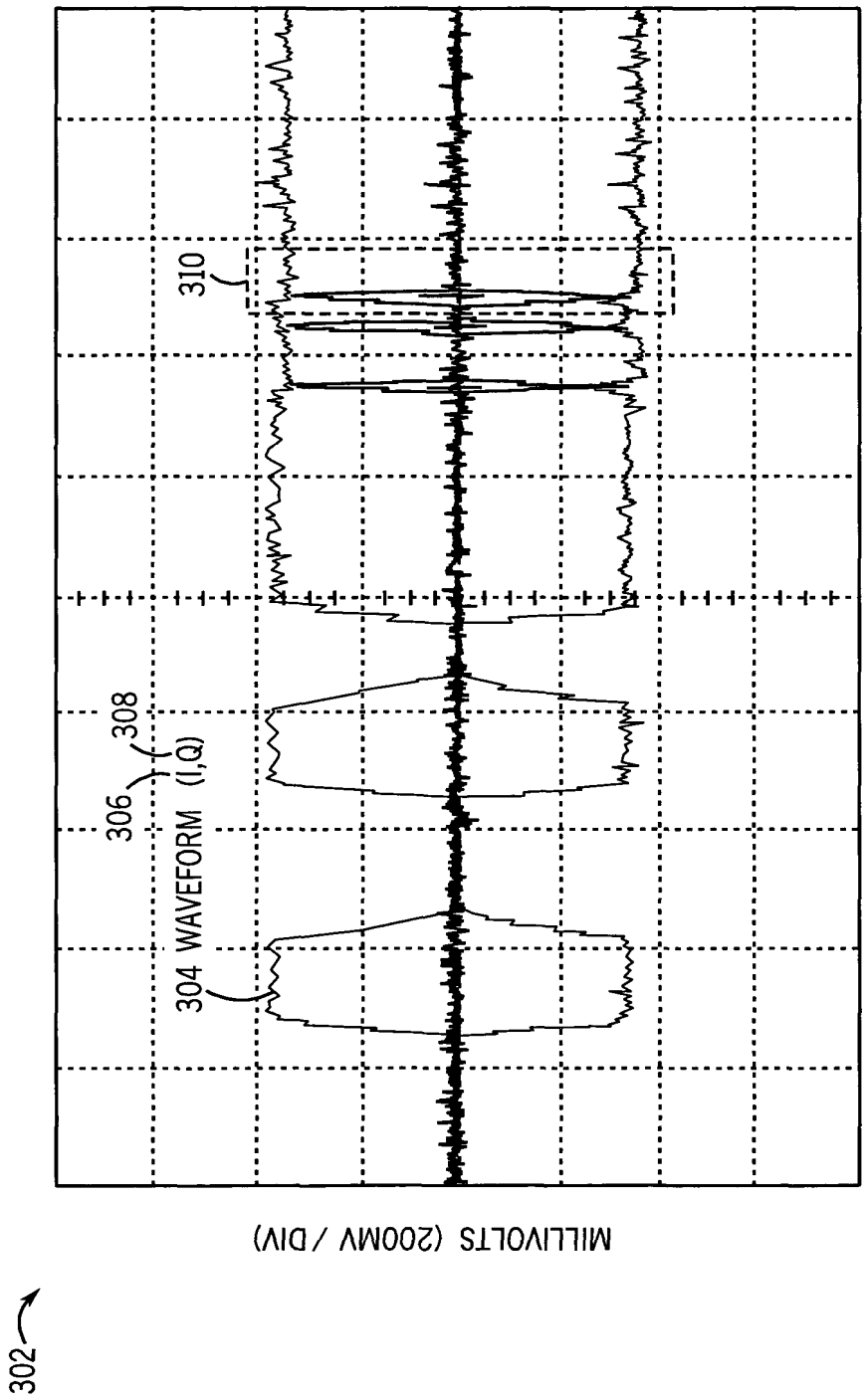
310
308
306
304 WAVEFORM (I,Q)
MICROSECONDS (1.00MS / DIV)
MILLIVOLTS (200MV / DIV)
302

FIG. 3

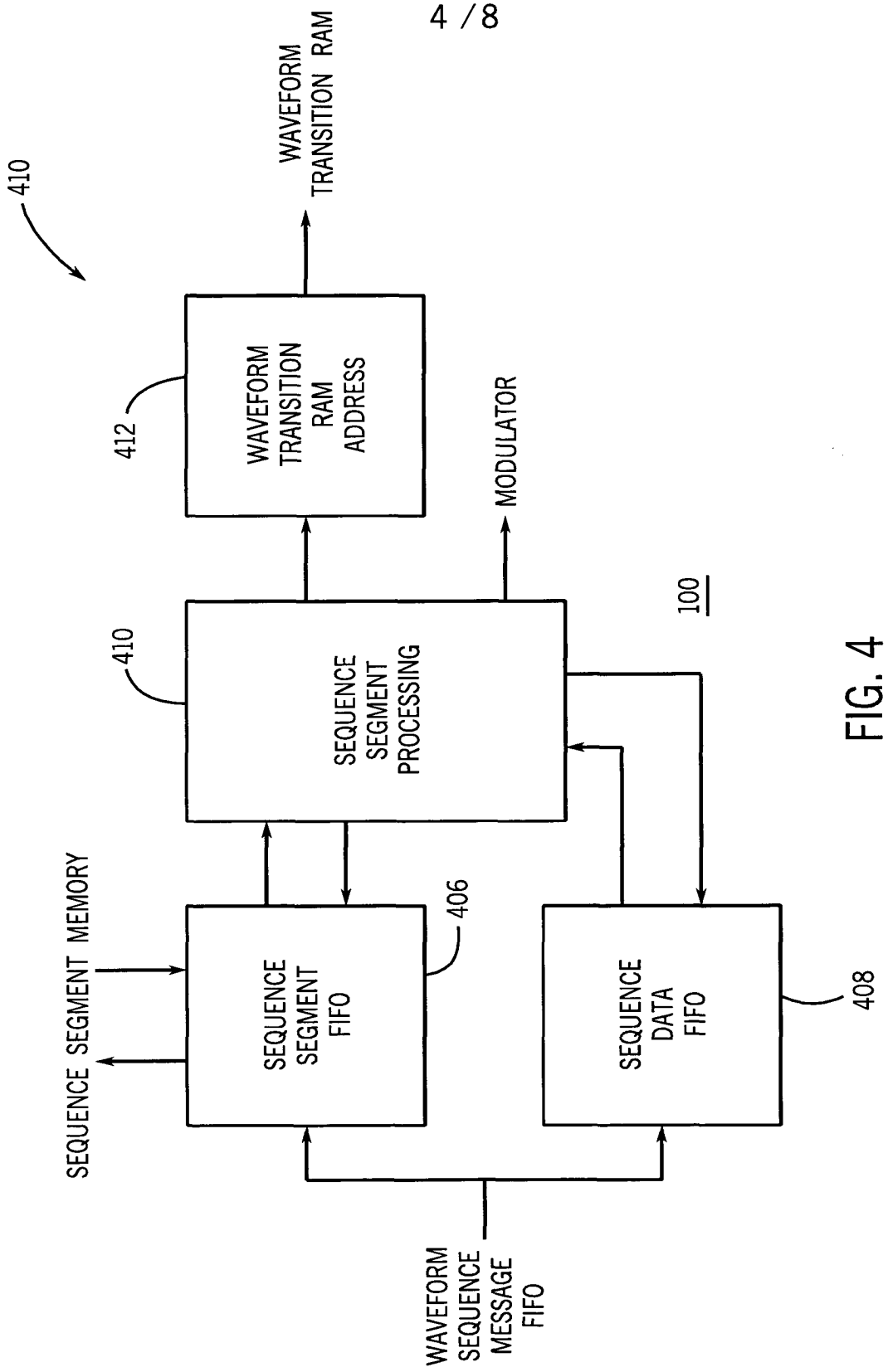
410
WAVEFORM TRANSITION RAM
412
WAVEFORM TRANSITION RAM ADDRESS
MODULATOR
100
410
SEQUENCE SEGMENT PROCESSING
SEQUENCE SEGMENT MEMORY
406
SEQUENCE SEGMENT FIFO
SEQUENCE DATA FIFO
408
WAVEFORM SEQUENCE MESSAGE FIFO

FIG. 4

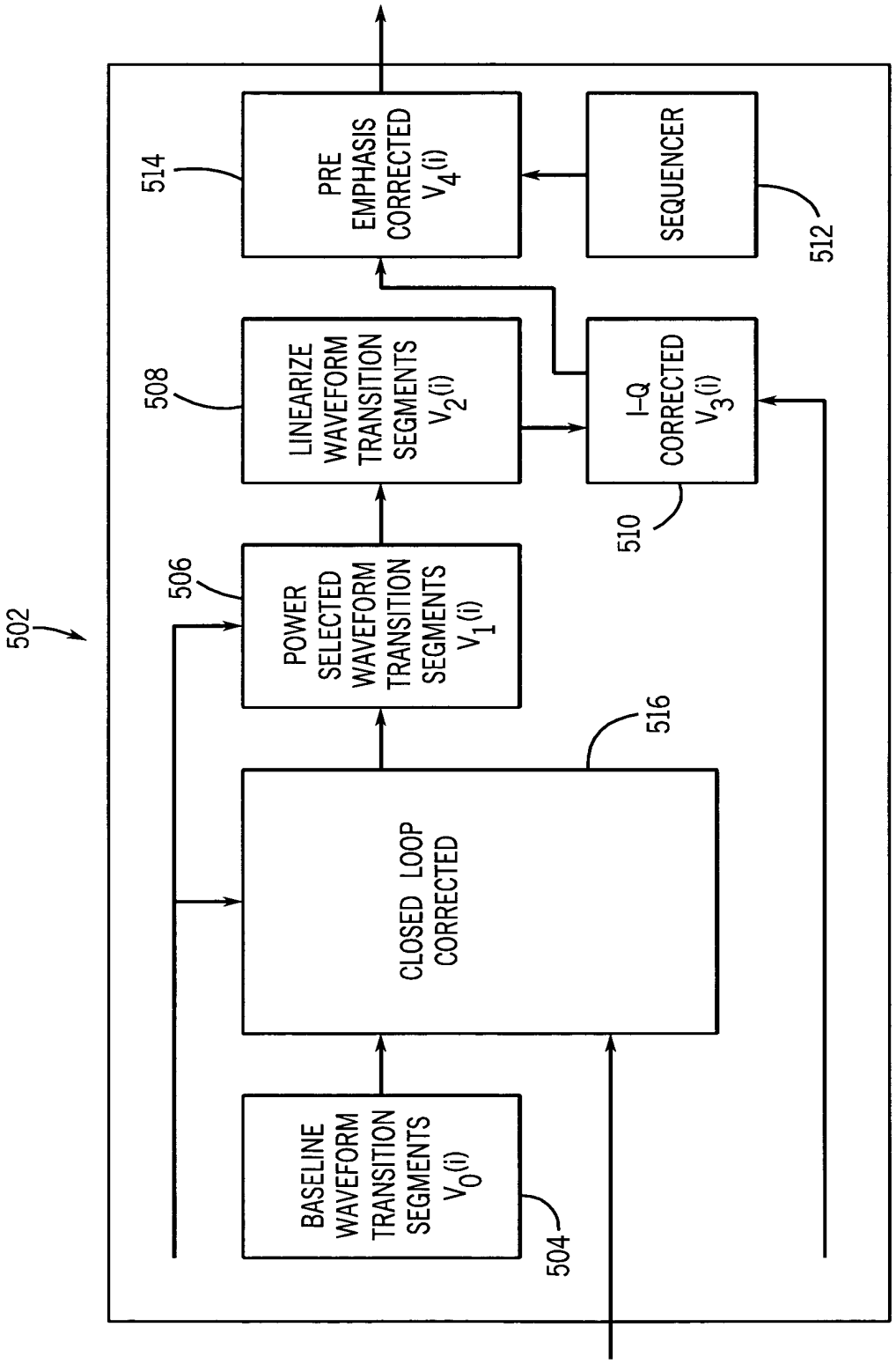
502
514
PRE EMPHASIS CORRECTED $V_4^{(i)}$
SEQUENCER
512
508
LINEARIZE WAVEFORM TRANSITION SEGMENTS $V_2^{(i)}$
I-Q CORRECTED $V_3^{(i)}$
510
506
POWER SELECTED WAVEFORM TRANSITION SEGMENTS $V_1^{(i)}$
516
CLOSED LOOP CORRECTED
BASELINE WAVEFORM TRANSITION SEGMENTS $V_0^{(i)}$
504
100

FIG. 5

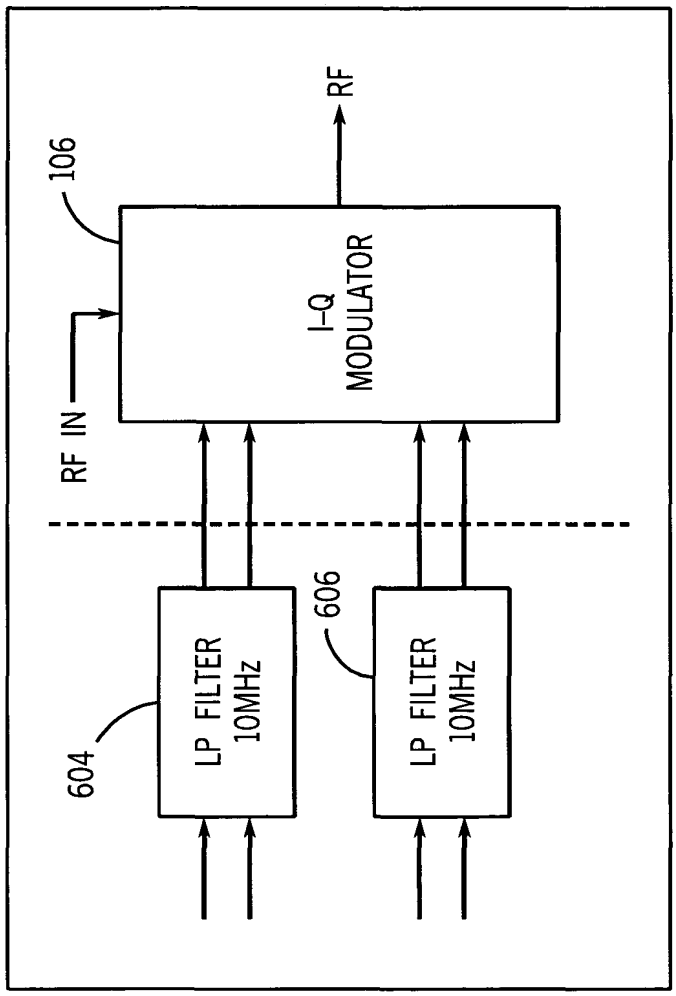
RF
106
I-Q MODULATOR
RF IN
606
LP FILTER 10MHz
604
LP FILTER 10MHz
100

FIG. 6

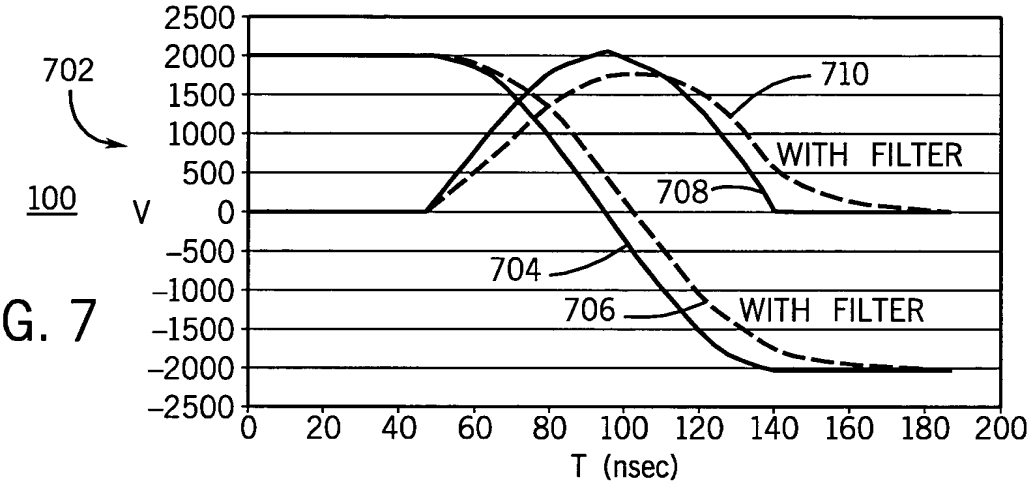

FIG. 7

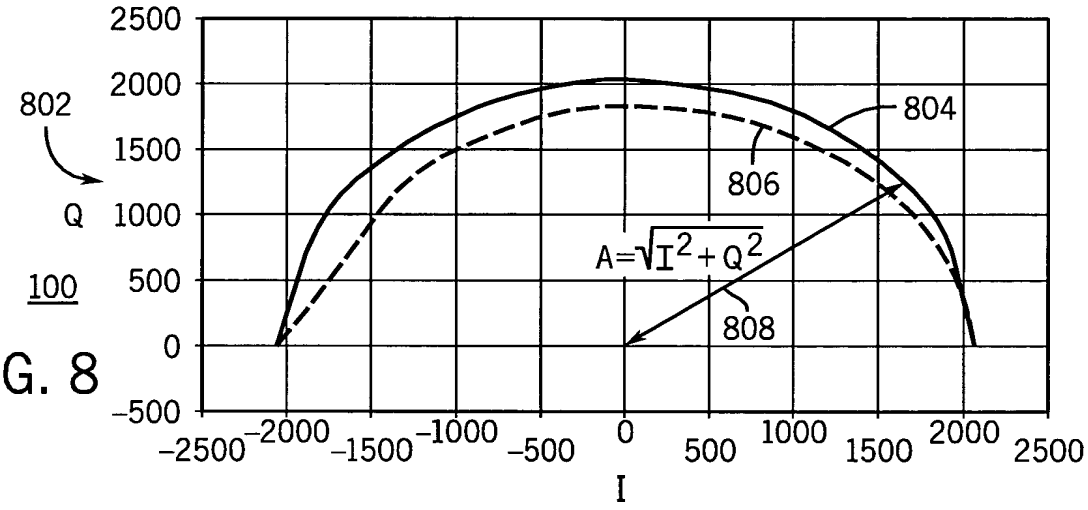

FIG. 8

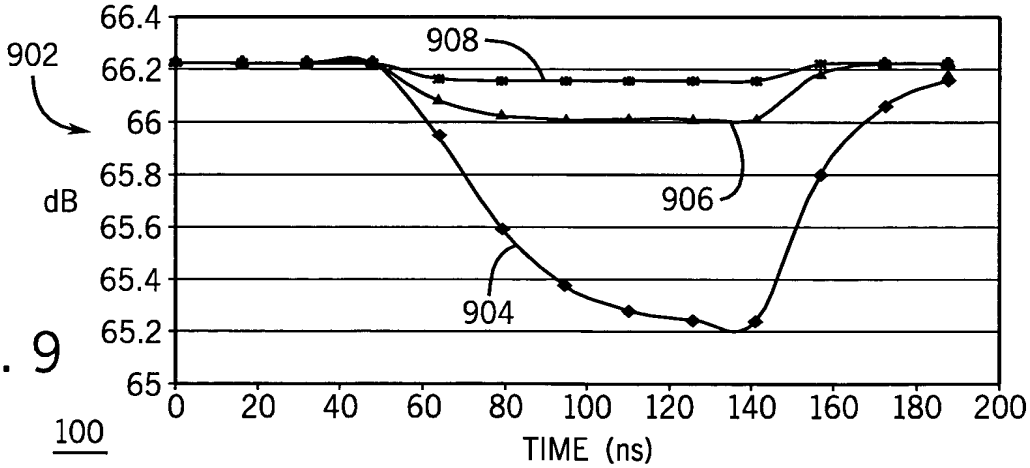

FIG. 9

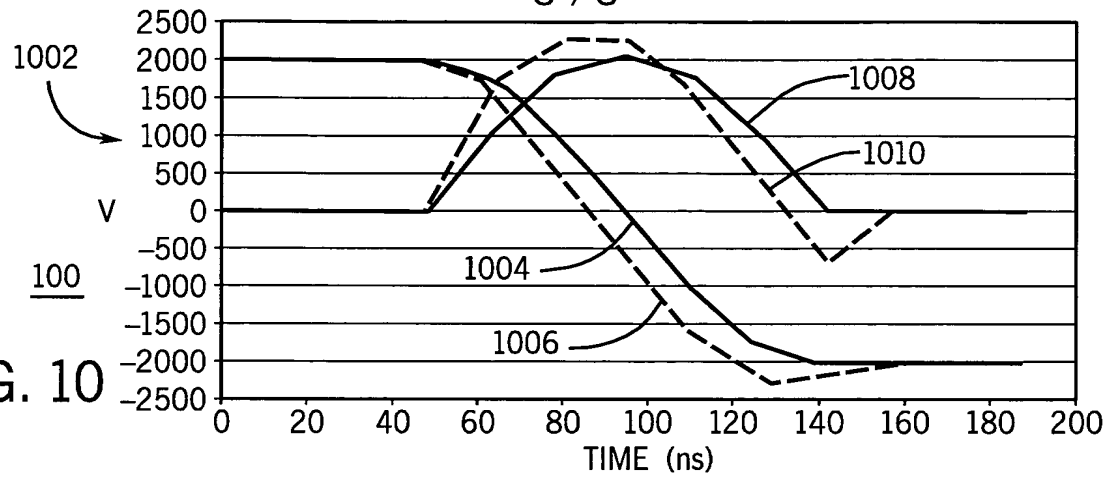

FIG. 10

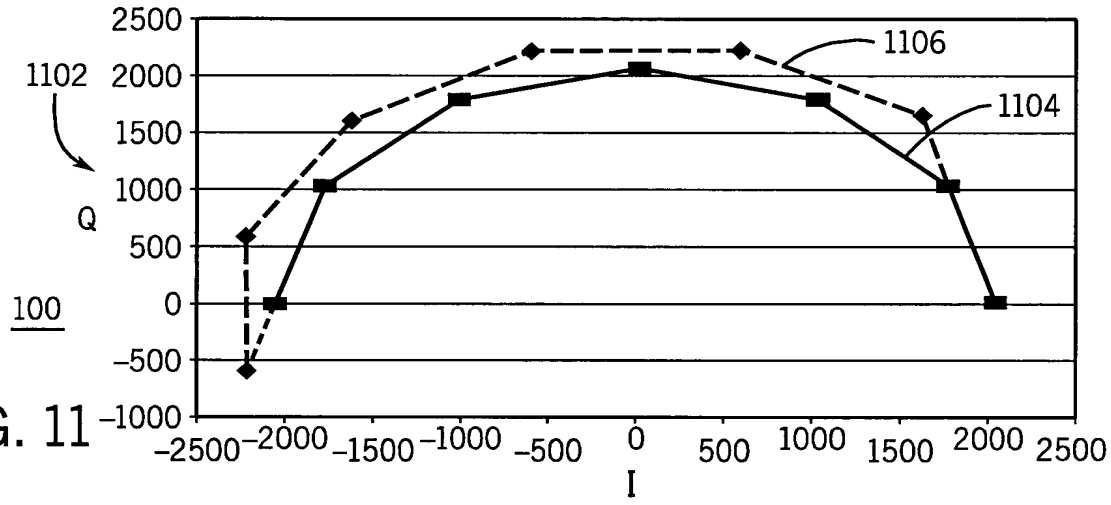

FIG. 11

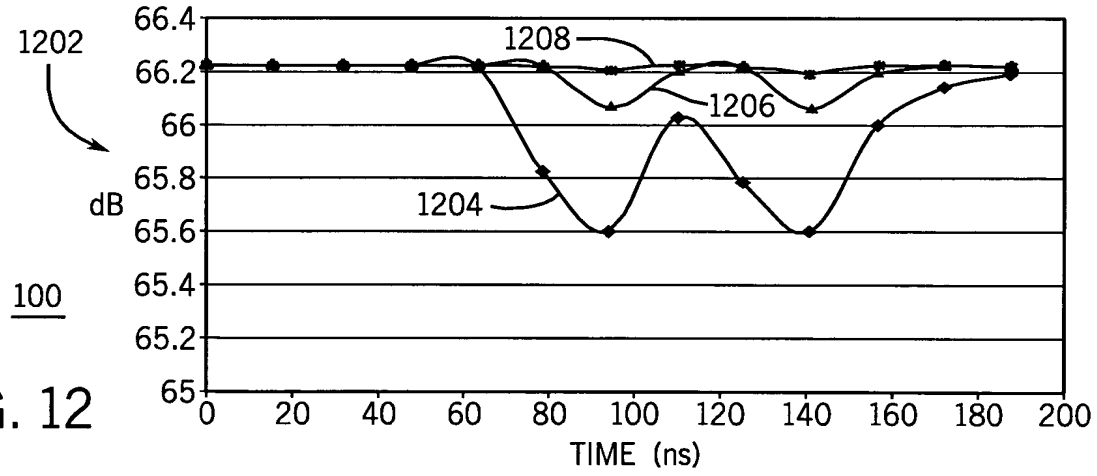

FIG. 12